

CONSOLE TYPE AIR CONDITIONERS
(MONOSPLIT SYSTEMS, AIR-TO-AIR, HEAT PUMP)

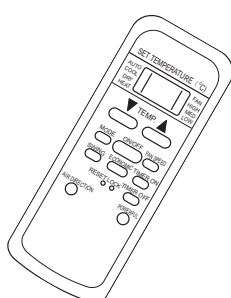
USER'S MANUAL

"Commercial DC Inverter" Models



HFII 351 XR

HFII 531 XR



R410A

HOKKAIDO

WARNING!

PLEASE READ CAREFULLY THIS MANUAL BEFORE OPERATING YOUR NEW AIR CONDITIONER.

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Outline of specific features

ECO-FRIENDLY REFRIGERANT R410A

As R410A refrigerant contains no chlorine, it does not damage ozone.

POWER CONTROL THROUGH "DC INVERTER"

Power is supplied according to real needs of comfort, thus permitting a sure energy saving.

INFRARED REMOTE CONTROLLER

All available functions of the air conditioner can be set by using the infrared remote controller, whose LCD panel immediately shows the operating parameters.

ON TIMER / OFF TIMER

ON Timer, allows to program the air conditioner's start within 24 hours. If the set time does not exceed 10 hours, the TIMER ON is set by 0.5 hours' steps. If the set time exceeds 10 hours, the TIMER ON is set by 1 hour's steps.

OFF Timer, allows to program the air conditioner's stop within 24 hours. If the set time does not exceed 10 hours, the TIMER OFF is set by 0.5 hours' steps. If the set time exceeds 10 hours, the TIMER OFF is set by 1 hour's steps.

The air conditioner's start and/or stop may also be programmed in sequence, within 24 hours.

DRY FUNCTION

When "DRY" function is selected, the air conditioner strongly reduces humidity inside the room, and also keeps the room temperature at a constant value.

ADVANCED CONTROL FOR INDOOR UNIT'S FAN

Thermostatic stops. In Heating mode, when set temperature has been reached inside the room, the compressor stops and the indoor fan speed is lowered to avoid cold drafts.

Hot Keep. At the beginning of operation in Heating mode, the indoor fan will start only 5 minutes later, i.e. when the temperature of indoor heat exchanger is adequate.

MICROCOMPUTER CONTROLLED DEFROSTING FUNCTION (HEATING MODE)

The microcomputer on printed circuit board can monitor all decreases in heating power of the air conditioner caused by frosting on outdoor heat exchanger, and inputs the signal for automatic defrosting; a LED lights up when this function is activated.

THERMOSTAT UNDER MICROCOMPUTER CONTROL

The thermostat being controlled by microcomputer allows remarkable energy saving and provides more comfort, as the room temperature is checked with the greatest precision.

INDOOR FAN AUTOMATIC SPEED CONTROL

The airflow from the Indoor Unit can be controlled step by step, on the basis of the difference between the room temperature and the set temperature. This allows to reduce the lapse of time needed to reach the desired temperature both in Cooling and Heating mode, by treating the appropriate air volumes.

MOTORIZED LOUVERS FOR AIRFLOW DIRECTION

The flaps can be controlled directly by the remote controller so as to reach your desired position.

- By pressing "AIR DIRECTION" button, you can select your desired angle for vertical airflow louver. Once the angle has been selected, the position is memorized by the inner electronics for next start of the air conditioner.
- If you press "SWING" button, the flaps move up and down continuously, thus increasing air circulation inside the room.

AUTORESTART AFTER A POWER FAILURE

- When a power failure occurs during operation, the air conditioner immediately stops.
- When power is restored, "OPERATION" lamp starts blinking. In particular, the air conditioner will automatically restart after 3 minutes have elapsed since power is restored. This means that it is not required to press "ON/OFF" button on the remote controller. The settings will be the same as before the blackout.

DIAGNOSTIC & PROTECTIVE FUNCTIONS

Shown by codified flashing of LED indicators on the Indoor Unit, they allow to diagnose in a quite precise way the main malfunctions which may concern the air conditioner.

3-minutes' delay protection: there is a protective control of the Outdoor Unit, to prevent compressor's damages after stops. This control is effective in case of malfunction, power failure, turning off the system, etc. and it does not allow Outdoor Unit to restart before 3 minutes have elapsed since the Unit stopped. During this time, Indoor Unit cannot run.

GENERAL INFORMATION

Recommended operating conditions

In order to obtain the Unit's best performances, it is recommended its use under the following conditions:

COOLING OPERATION	Outdoor temperature:	HFII 351XR Model:	0°C to 43°C
		HFII 531XR Model:	-15°C to 43°C
	Room temperature:		17°C to 32°C
	CAUTION: Room relative humidity should be less than 80%. If the air conditioner operates beyond this limit, the surface of the heat exchanger could get covered with frost.		
HEATING OPERATION	Outdoor temperature:		-15°C to 21°C
	Room temperature:		0°C to 30°C
DRY OPERATION	Outdoor temperature:		11°C to 43°C
	Room temperature:		17°C to 30°C

Use of air conditioner out of the above mentioned temperature ranges could cause the intervention of built-in protective functions consequently stopping the system operation.

NOTE: If the Units operates in rooms which are saturated with oil vapors or volatile matters, harmful substances could coat and clog the Indoor Unit's heat exchanger. Besides, scalings of saltiness could form on the Outdoor Units installed in sea-surroundings; if not removed, they will damage the Units in a very short time. In both cases, contact the Authorized Technical Service to require frequent maintenance.

SAFETY PRECAUTIONS

Before starting the air conditioner, please read carefully the information in this "USER'S MANUAL". The User's Manual contains very important suggestions related to installation, operation and maintenance of the air conditioner and concerning your personal safety.

The Manufacturer accept no responsibility for the damages that may arise due to non-observance of the instructions listed in this "USER'S MANUAL".

Disposal of an old air conditioner

Before disposing an old air conditioner, please make sure it is inoperative and carry out the disposal by adopting all safety precautions. Unplug it from the power line in order to avoid risks of electric shock.

Please remember that an air conditioner contains refrigerant fluid, requiring specialized waste disposal.

The valuable materials contained in the air conditioner can be recycled. Contact your local Waste Disposal Center for adequate disposal or contact your Dealer for any question.

Please make sure that piping of your air conditioner does not get damaged before being picked up by the relevant Waste Disposal Center. You can contribute to the protection of the environment by adopting an appropriate anti-pollution method of disposal.

Disposal of the packaging of your new air conditioner

All the packaging materials used in the package of your new air conditioner can be disposed without any danger for the environment.

The cardboard may be broken or cut into small pieces and given to a Waste Paper Disposal Service. The wrapping bag made of polyethylene and the polyethylene foam pads contain no fluorochloric hydrocarbon.

All these valuable materials may be taken to a Waste Collecting Center and used again after adequate recycling.

Consult your local Authorities for the name and address of the Waste Materials Collecting Centers and Waste Paper Disposal Services nearest to your house.

General warnings for safety

- Do not operate damaged air conditioners. In case of doubt, contact your Dealer.
- Use of air conditioner must be carried out in strict compliance with the instructions listed further on.
- Do not damage any parts of the air conditioner that carry refrigerant by piercing or perforating the piping with sharp or pointed objects, by crushing or twisting the tubes or scraping off the surfaces' coatings. If the refrigerant spurts out and gets into eyes, this may result in serious injuries.
- Do not obstruct or cover the ventilation grille of the air conditioner. Do not put fingers nor insert objects into the inlet/outlet vent or into the motorized louver.
- Do not allow children to play with the air conditioner. Children should be never allowed to sit on the Outdoor Unit.
- The appliance is not intended for children and disabled people. They must not operate the air conditioner without supervision.
- Electrical works must be carried out according to the local laws. If the power cable is damaged, it must be replaced by the Manufacturer or by qualified Personnel. Size of power cables and connecting wires must be adequate to the characteristics of the air conditioner (current values and power input values).
- If fuses on the PCB are blown, they must be replaced with new fuses of the same type and size.
- After installation, power plug should be properly disposed.
- Exhausted batteries (infrared remote controller) should be properly disposed.
- Always remember to unplug the air conditioner before opening the inlet grille. Never try to unplug the air conditioner by pulling off the power cable. Always grip the power plug firmly and pull it straight out of the power socket.

SAFETY PRECAUTIONS

- **Strictly observe the instructions provided in this Manual.**
- **The air conditioning system contains inside its refrigerant circuit the R410A gas under pressure. Never disconnect refrigerant pipes or connection joints.**
- **Never perform any handling on Outdoor Unit service valves or on Indoor Unit's unions.**
- **Keep this Manual in a safe place easy to reach at any time for convenient reference.**
- **In case the air conditioner is transferred and reinstalled, this User's Manual should always be attached to the appliance.**

SAFETY INSTRUCTIONS

- Please read carefully the following Safety Instructions before operating the air conditioner.
- A strict observance of the instructions indicated in this "USER'S MANUAL" will prevent personal hurt and incidents to the User. Moreover, correct operation and long life of the system will be ensured.
- Depending on the seriousness of potential risks and damages, the reported Instructions are classified in two types: "WARNING" and "CAUTION". A strict observance of the Instructions is required to guarantee your personal safety and the safety of the environments where the Units are installed.
- The following Instructions are related to the air conditioner's installation. They have been reported in this "USER'S MANUAL" just to allow the User to check that installation has been properly carried out. If an improper installation - not corresponding to the Instructions - is verified, please contact the Dealer or the Authorized Technical Service.

The User must never attempt to repair, install or perform special maintenance by himself.

Key to symbols



WARNING

This symbol points out the risk of serious injury or death.



CAUTION

This symbol points out the risk of injury or damage to the property.



Prohibition. Action or procedure not allowed, with serious effects on objects and people.






Obligation. Compulsory action or procedure. The missed observance could bring serious effects on objects and people.






SAFETY PRECAUTIONS







Installation

Never try to install this Unit by yourself, i.e. without the support of Technical Personnel. Never try to repair the Unit by yourself. The Unit's components can be reached only by opening or removing the covering panels, and this involves exposure to high voltage. Even by disconnecting power supply, it is not always possible to avoid the risk of electric shocks.

 WARNING	
<ul style="list-style-type: none"> • Please always contact the Dealer or the Authorized Service Center for installation. Never attempt to install the air conditioner by yourself, because improper installation could cause electric shock, injuries, water leakage or fire. 	
<ul style="list-style-type: none"> • Please always contact the Dealer or the Authorized Service Center for any servicing operation or special maintenance. Never try to repair or carry out special maintenance by yourself. Improper repair or maintenance could cause electric shock, injuries, water leakage or fire. 	

Please confirm that installation has been carried out according to the following prescriptions:

 CAUTION	
<ul style="list-style-type: none"> • When installing, all possible countermeasures must be taken to avoid refrigerant leaks. If there is a high concentration of refrigerant gas in the room, oxygen lack may occur. 	
<ul style="list-style-type: none"> • Do not install the air conditioner near burners, heat sources or flammable gas. This is to avoid the risk of malfunctioning, fire or explosion. 	
<ul style="list-style-type: none"> • Ensure that a circuit breaker has been installed on the power supply line of the air conditioner, to avoid the risk of electric shocks. 	
<ul style="list-style-type: none"> • When installing in a small room, countermeasures should be taken in case of a refrigerant leak exceeds the proper range. Otherwise, it will cause asphyxia. 	

 CAUTION	
<ul style="list-style-type: none"> • Ensure that drain hose and drain pipe installation has been carried out correctly. Incorrect installation or maintenance will cause water leakage. 	
<ul style="list-style-type: none"> • Ensure that Indoor and Outdoor Units have been properly grounded. Defective grounding could cause electric shock. 	 
<ul style="list-style-type: none"> • This kind of appliance needs a specific circuit breaker with proper protective devices against overcurrents and short circuits (fuses or automatic switches). 	 

SAFETY PRECAUTIONS

Always observe the operating precautions listed in the following tables. In this way, correct operation and safeguard of people, animals and objects inside the air-conditioned room will be ensured.

 WARNING	
<p>Use the correct voltage and frequency for power supply.</p> <p style="text-align: center;">220~230V, 50Hz</p>  	<p>Do not insert the air conditioner's plug into multiple sockets or into sockets to which other appliances are connected. Do not use plug adapters.</p>  
<p>Fully insert the plug into the power socket and make sure the connection is secure and without play. Otherwise, sparks and fire may occur.</p>  	<p>Do not put heavy objects on the power supply cord. Take care not to damage it. Do not use supply cords which are faulty or damaged.</p>  
<p>Do not pull the plug out of the power socket by drawing the power cord. Damaging to the power cord, to the plug or to the socket may occur, and this could result in electric shock or fire generation..</p>  	<p>Never turn off the air conditioner by pulling the power supply plug out of the socket. This could cause electric shock or fire. Always press the "ON/OFF" button on remote controller.</p>  
<p>Do not use extension cords. Do not use rolled power supply cords.</p>  	<p>Never touch switches, sockets or power supply plugs with wet hands. This could cause electric shock.</p>  
<p>If you smell something burning, immediately turn off the air conditioner, switch the circuit breaker to "OFF" or "0", and contact the Authorized Technical Service.</p>  	<p>Do not insert any objects into the air inlet or outlet of Indoor and Outdoor Units. Even if fans are stopped, they could automatically start all at once.</p>  
<p>You should avoid to expose your body directly to cool air for a long time. This may cause health problems to you.</p>  	<p>Do not direct the airflows towards infants, aged or disabled people.</p>  

SAFETY PRECAUTIONS

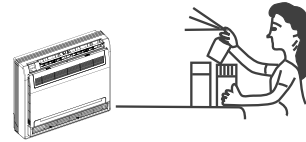


CAUTION

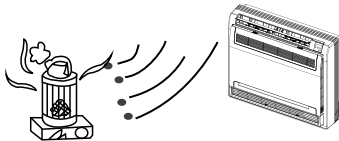
Ventilation should be operated when using at the same time the air conditioner and gas burners. Insufficient ventilation may cause lack of oxygen.



Do not use sprayers near the air conditioner and do not spray anything towards the appliance.



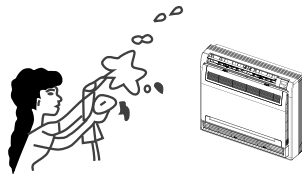
Do not place burners near the airflow of air conditioner.



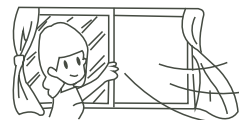
Do not expose plants or animals to the direct airflow of the air conditioner.



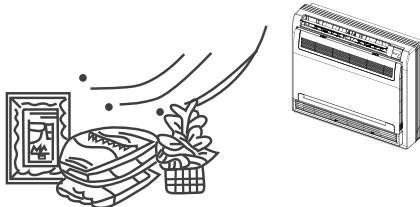
To avoid the risk of electric shock, do not sprinkle water nor other liquid on Indoor Unit. Do not clean the air conditioner by water spurts.



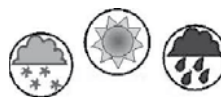
Ventilate the room regularly while the air conditioner is operating. Fail to follow this advice could result in lack of oxygen inside the room.



Do not expose food, plants, animals, precision devices or works of art to the direct airflow of the air conditioner.



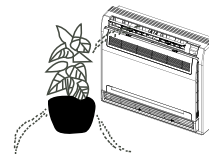
For proper performance, operate the air conditioner under the recommended temperature and humidity range. If the Unit operates beyond these conditions, malfunctions may occur or dew may drip out of the Indoor Unit.



When necessary, replace fuses with new ones of the same type and size. Never use a piece of iron or copper instead of the proper fuse, as it could result in a malfunction or in a fire accident.



Do not place anything in front of the air conditioner nor obstruct the air outlet.



Do not put any object on the air conditioner. On the appliance's upper part there is an air grille that must not be obstructed. Besides, a heavy object may cause the air conditioner's fall.

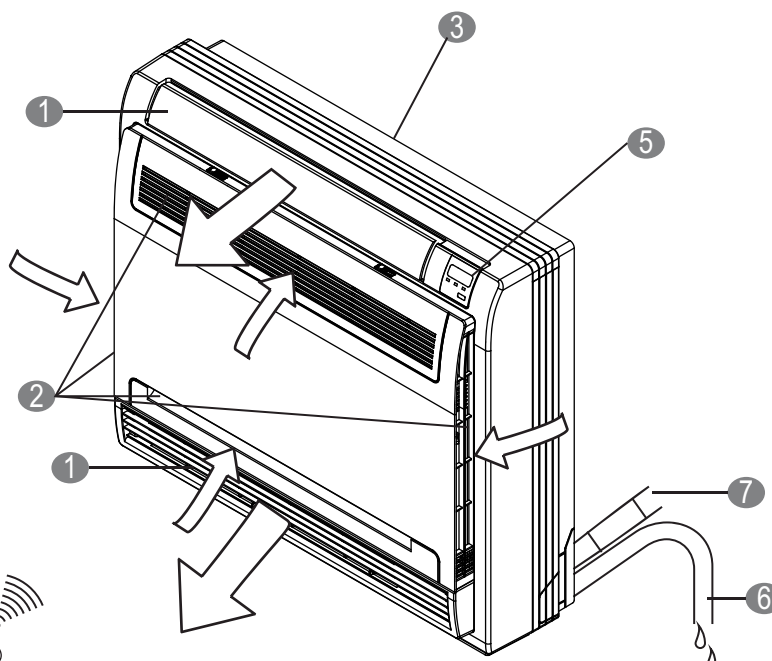


Do not touch the heat exchangers' metal flaps on Indoor and Outdoor Units. This could cause hurts due to the sharp shape of the flaps. Take care of this especially when removing the air inlet panel and the air filters.

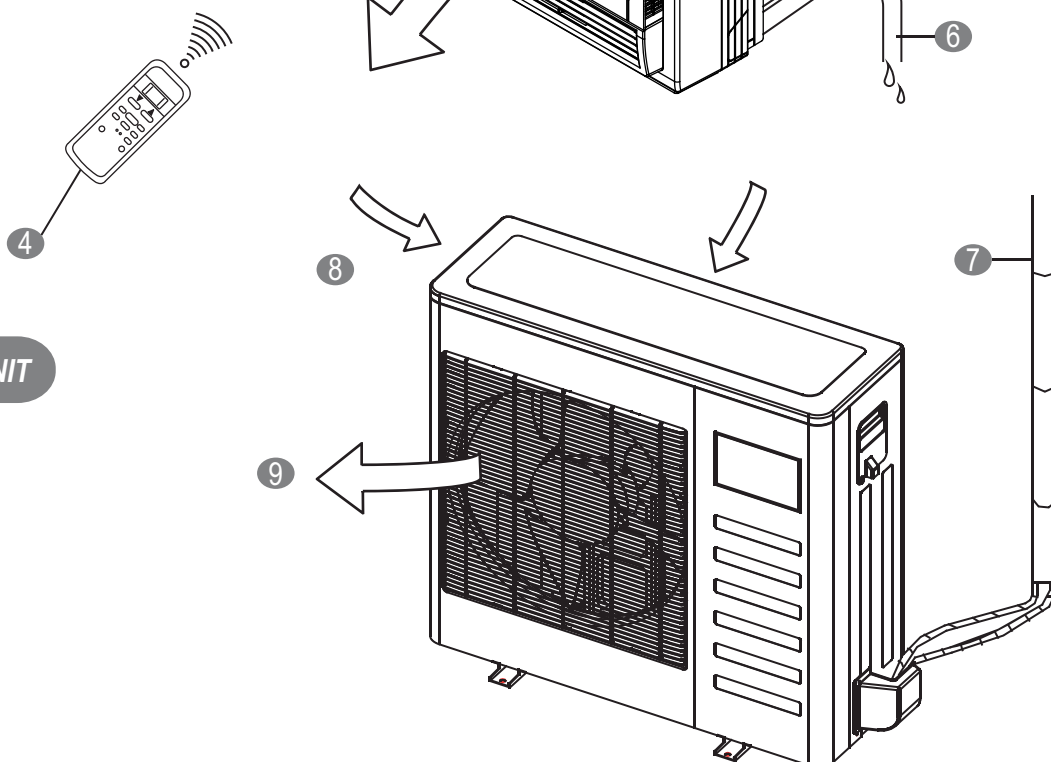


OUTLINE OF INDOOR & OUTDOOR UNITS

INDOOR UNIT



OUTDOOR UNIT



INDOOR UNIT

- ① Air flow louver (at air outlet)
- ② Air inlet (with air filter in it)
- ③ Installation part
- ④ IR Remote Controller
- ⑤ Display panel
- ⑥ Drain pipe

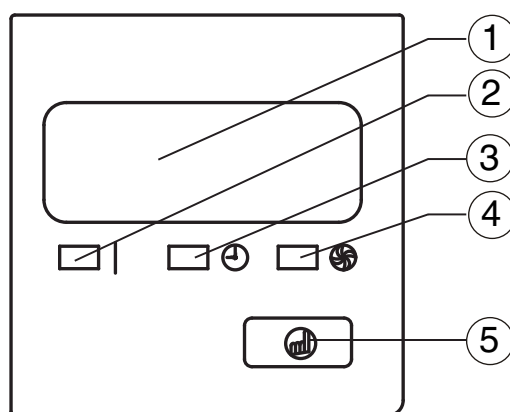
OUTDOOR UNIT

- ⑦ Connecting pipe
- ⑧ Air inlet
- ⑨ Air outlet

NOTE: The Figure has the only purpose to show the User how to operate for a correct use of the appliance. Therefore, the real aspect of the Product may be lightly different.

LED INDICATORS ON INDOOR UNIT

The electronics of the air conditioner is able to diagnose eventual malfunctions which can be interpreted by the 3 LED indicators on the Indoor Unit's frontal panel. According to the state of each indicator (ON, flashing, OFF), the Authorized Technical Service is able to detect the common type of anomalies.



① **Signal receiver**

It permits to receive signals from the remote controller.

② **OPERATION LED**

When connecting the Unit to the power source, the LED starts flashing. During the air conditioner's operation, it stops flashing and lights up.

③ **TIMER LED**

It lights up when TIMER function is selected (air conditioner's programmed start and/or stop).

④ **PRE-DEF (DEFROST/PREHEATING) LED**

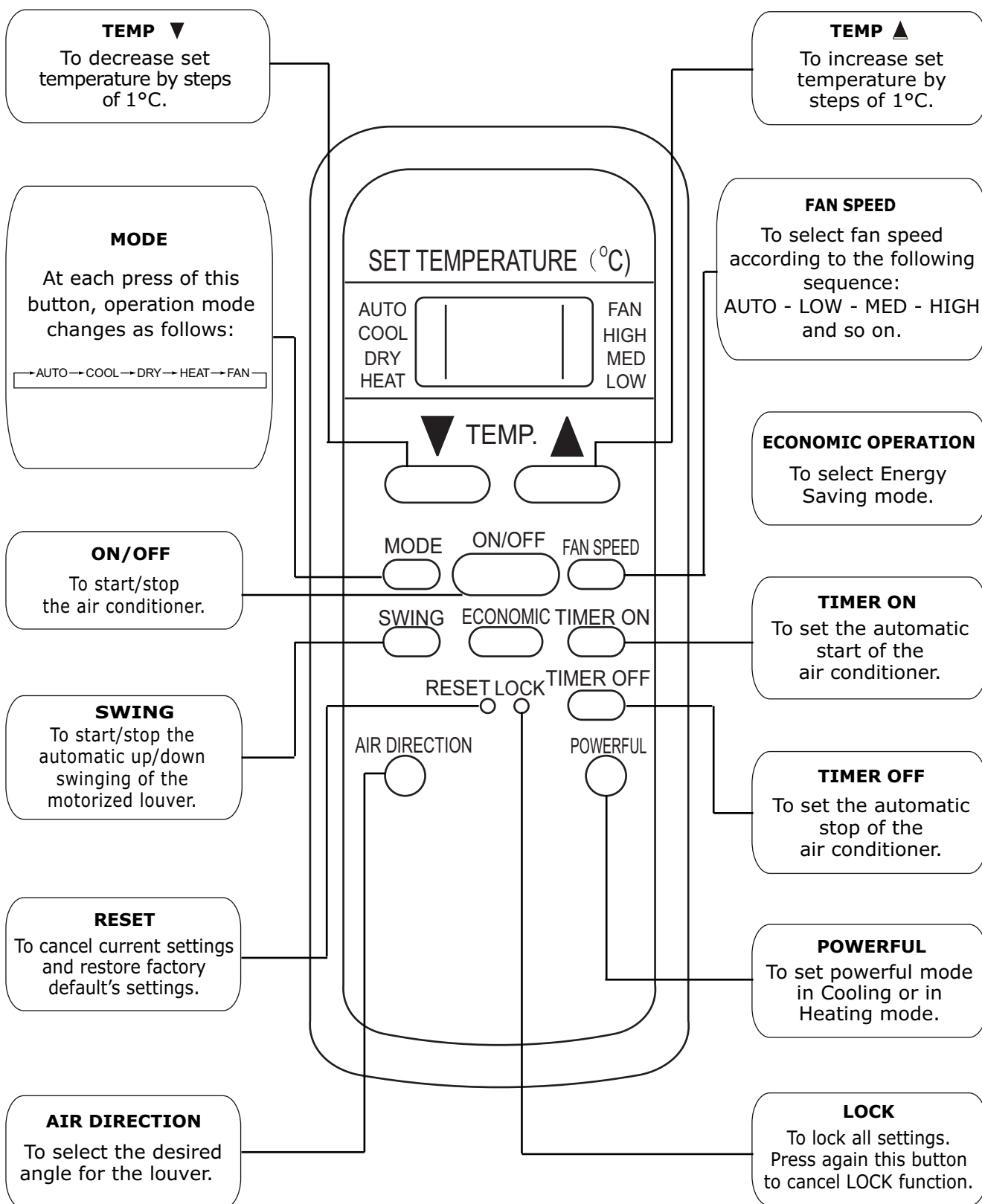
- In Heating mode, if a layer of frost forms on the outdoor heat exchanger, defrosting automatically starts and the LED lights up.
- The LED also lights up when indoor heat exchanger's Preheating function is activated. This occurs in Heating mode, in order to avoid the emission of air at low temperature (prevention function anti-cold drafts).

⑤ **Emergency button**

To start the air conditioner when the remote controller is not available, and to start the Test mode in Cooling operation.

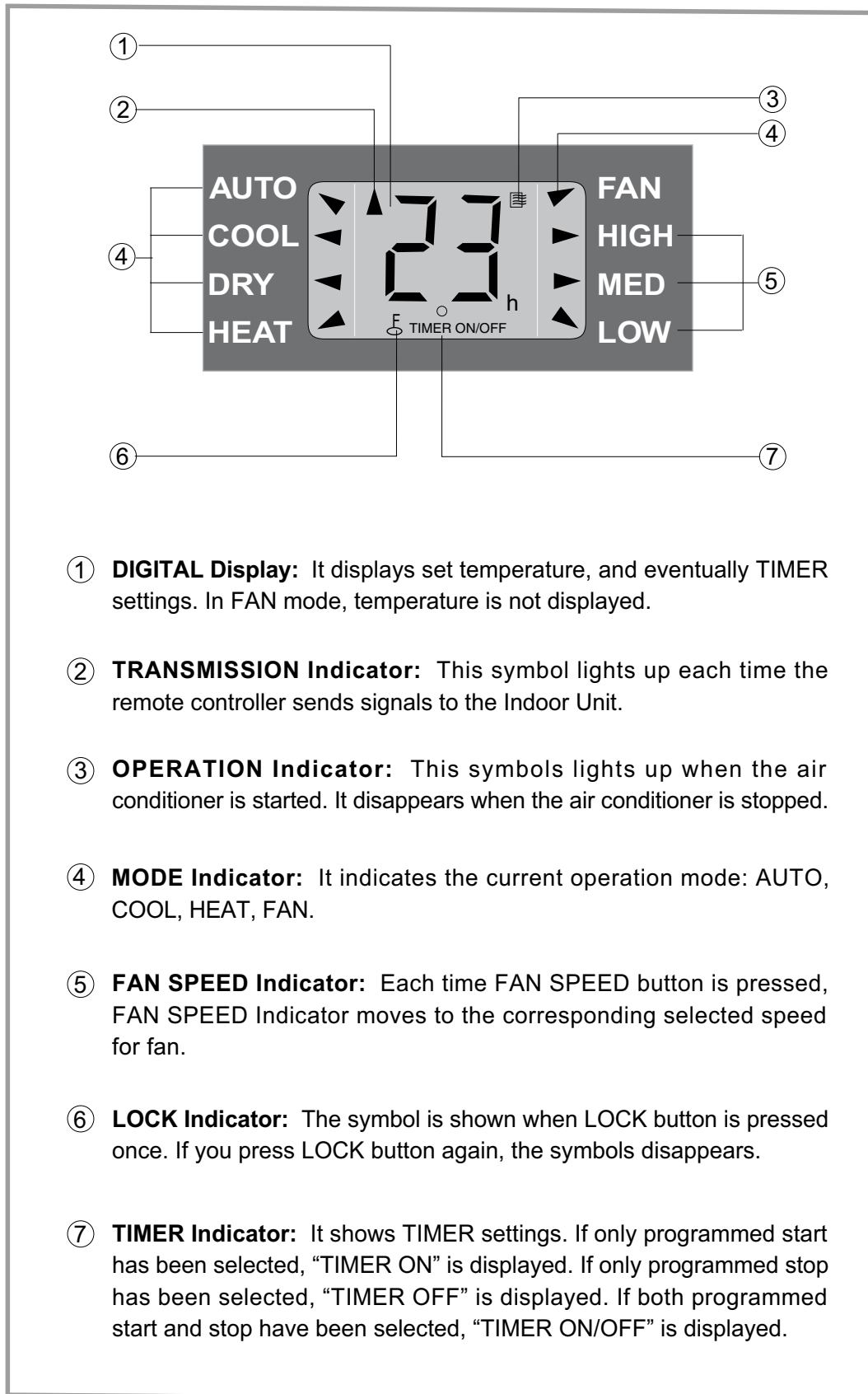
IR REMOTE CONTROLLER

Buttons' outline



IR REMOTE CONTROLLER

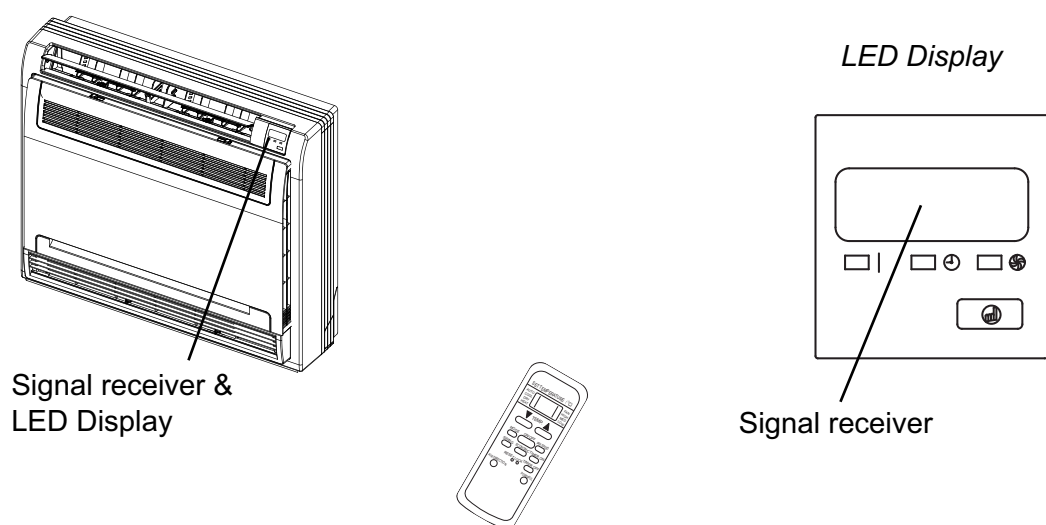
LCD panel outline



All Indicators are shown in the Figure above only for explanation. During real operation, the display will only show the Indicators corresponding to the User's selections.

IR REMOTE CONTROLLER

Installation & correct use of remote controller



Max. allowed distance: 8 metres

- 1) Make sure the 2 batteries ("AAA" type, 1.5V) are fully charged and correctly fitted in the special slot on the remote controller, by respecting the polarity marked on the remote controller itself. The batteries' average life is of about 6 months ~ 1 year.
- 2) Use the remote controller by turning it towards the Indoor Unit at no more than 8 metres from the Unit itself.
- 3) The remote controller will not work properly if curtains, doors or other objects placed between the remote controller and the infrared receiver on the Indoor Unit do not allow the signal transmission.
- 4) If the remote controller is placed sideways as regards to the signal receiver, it will operate within a max. angle of 30° on the right or on the left from the receiver. If the remote controller is fixed on its wall bearing, it will work within a side distance of 0.5 metres on the right or on the left from the receiver.
- 5) If the infrared receiver on Indoor Unit is exposed to direct sunlight, the remote controller (and consequently the air conditioner) probably will not work properly.
- 6) In order to avoid interferences, keep the remote controller at least 1 metre away from Hi-Fi, TV, radio and in general from appliances generating electromagnetic fields.
- 7) If the remote controller stops to operate correctly, press "RESET" button on the remote controller to cancel current settings and restore factory defaults' settings. Set current time again, and check if now the remote controller operates correctly.
- 8) Do not wet the remote controller and prevent any liquid from falling into it.
- 9) Handle the remote controller with care and pay attention not to drop it nor place heavy objects on it. Keep it far away from heat sources such as heaters, cooking stoves, electric blankets, etc.
- 10) Never use solvents nor strong detergents for cleaning the remote controller. Only use a soft, clean and dry cloth.

Batteries' replacement

If after the transmission of a signal by remote controller the confirmation sound emitted by the Indoor Unit's buzzer is no more heard, or the indicator on remote controller's display does not light up, batteries must be replaced.

To open the battery case, see the Figure below.

CAUTION!

If after replacing batteries the remote controller does not work, remove batteries and reinsert them after a few minutes, or press the inner button "RESET" on remote controller.

- Always insert two new batteries of AAA type (1.5V) type of the same brand (never insert one new battery and one old battery, as this may cause a malfunction).

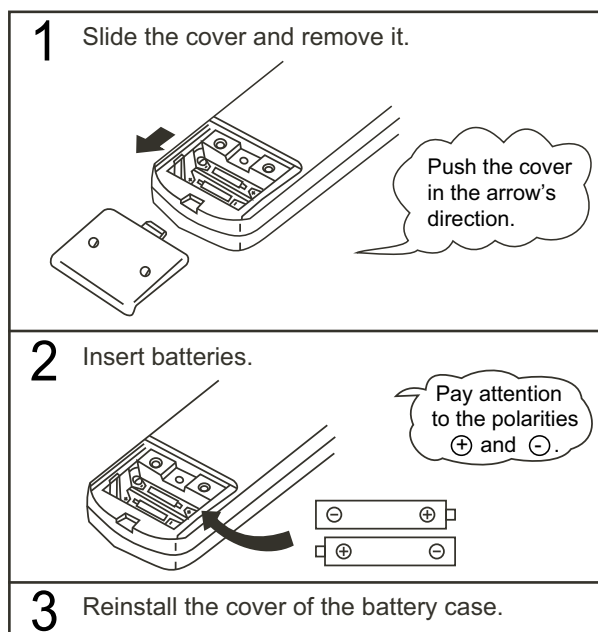
- Please observe the batteries' polarity ("+" / "-") marked on the battery case and on the batteries themselves.

- Before closing the battery case's cover, check if the remote controller displays "0:00" with flashing colon.

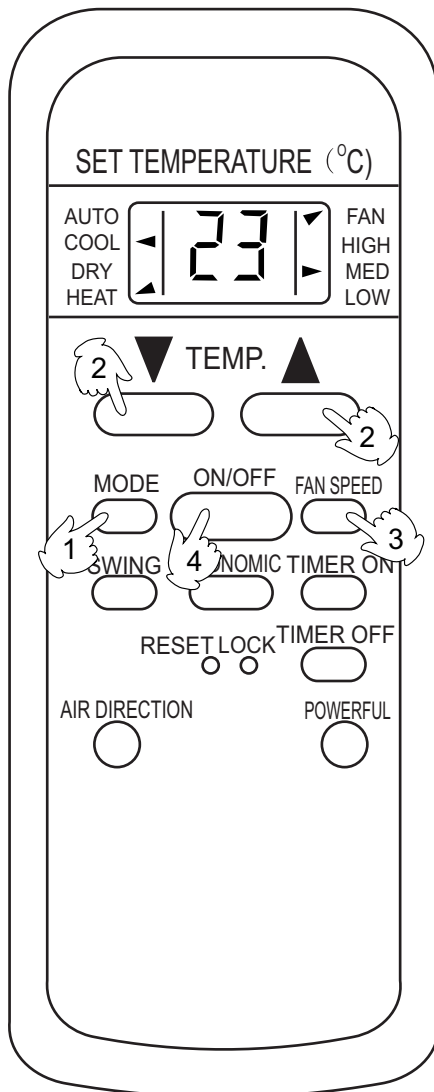
- Remove batteries from remote controller if you foresee not to use it for several weeks. A leakage of acid may damage the remote controller.

- Normal average life of a battery set is of about 6 months ~ 1 year.

Batteries' replacement



COOL, HEAT, FAN Modes



Connecting/operating the air conditioner

Connect the air conditioner to the power source: the "OPERATION" LED on Indoor Unit's panel will start flashing.

1. Select your desired operation mode by pressing "MODE" button:
 - COOL
 - HEAT
 - FAN
2. Select your desired temperature by pressing "TEMP" buttons.
3. Select your desired fan speed by pressing "FAN SPEED" button:
 - AUTO
 - LOW
 - MED
 - HIGH
4. Press "ON/OFF" button to start the air conditioner: "OPERATION" LED on Indoor Unit's panel will stop flashing and will light up.

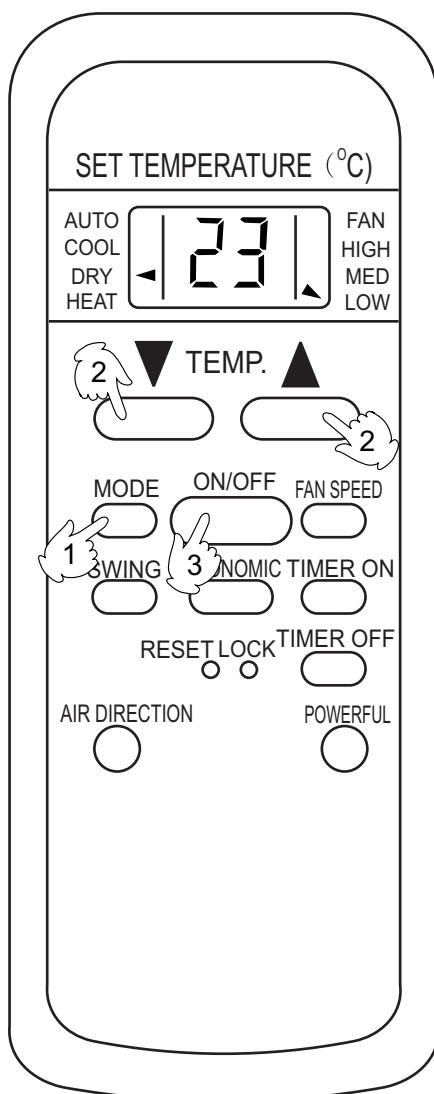
Stop

Press "ON/OFF" button on remote controller to stop the air conditioner's operation.

NOTES:

1. In "FAN" mode, it is not possible to select your desired room temperature. Therefore, move directly from above item No.1 to item No.3.
2. Operation in "COOL", "HEAT" and "FAN" modes is memorized by the microcomputer, so if you would like to keep it for next operation of the air conditioner, you only need to press "ON/OFF" button on remote controller. Set temperature and fan speed settings will be memorized too, so they will be the same at next restart of the air conditioner.
3. It is possible to change operation mode while the air conditioner is operating. However, the Unit will not immediately start operating according to the new mode, but a little delay is needed for carrying out a test and choosing new operating parameters.

DRY Mode



“DRY” mode is a Cooling mode with low fan speed, in which the refrigerant flow through indoor heat exchanger is compatible with low fan speed, so as to permit the condensation of room humidity without changing of air temperature.

Operation in “DRY” mode dries the air.

Connecting/operating the air conditioner

Connect the air conditioner to the power source: “OPERATION” LED on Indoor Unit’s panel will start flashing.

1. Select “DRY” mode by pressing “MODE” button.
2. Select your desired temperature by pressing “TEMP” buttons.
3. Press “ON/OFF” button to start the air conditioner: “OPERATION” LED on Indoor Unit’s panel will stop flashing and will light up.

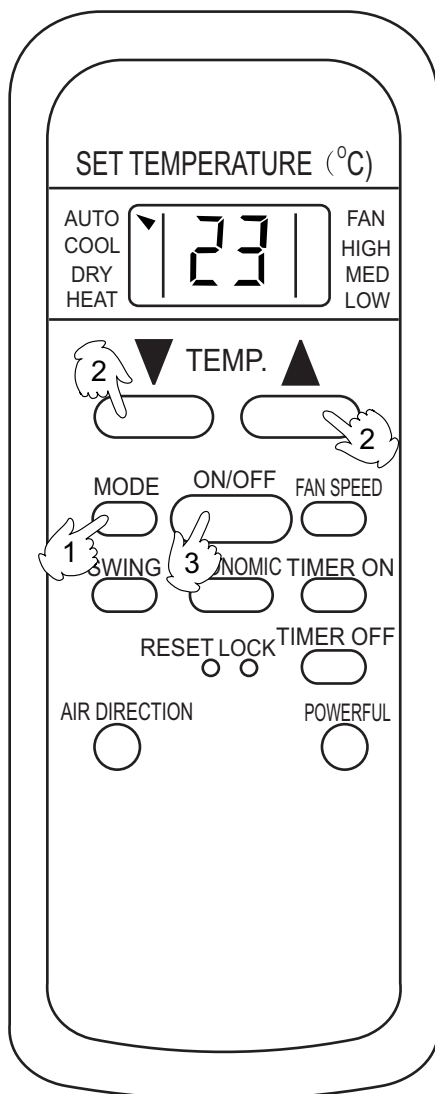
Stop

Press "ON/OFF" button on remote controller to stop the air conditioner’s operation.

NOTES:

1. In “DRY” mode, it is not possible to select your desired fan speed, as it will be automatically controlled by the microcomputer (the display shows “LOW” indication).
2. The User can select his desired room temperature. However, if batteries are replaced or “RESET” button is pressed, operation mode changes to “AUTO” and temperature is automatically set to 24°C.
3. “DRY” mode, as well as other operation modes, is memorized by the microcomputer, so if you would like to keep it at next restart of the air conditioner, you only need to press “ON/OFF” button on remote controller. In “DRY” mode, if the User selects a temperature other than 24°C, set temperature will be kept in memory for next restart of the air conditioner.
4. It is possible to change operation mode while the air conditioner is operating in “DRY” mode. However, the Unit will not immediately start operating according to the new mode, but a little delay is needed for carrying out a test and choosing new operating parameters.

AUTO mode



When “AUTO” mode is selected, the air conditioner automatically chooses the suitable operation settings according to room temperature and eventually to the temperature set by the User.

The four possible options are among: “COOL”, “DRY”, “HEAT”, “FAN”.

Connecting/operating the air conditioner

Connect the air conditioner to the power source: “OPERATION” LED on Indoor Unit’s panel will start flashing.

1. Select “AUTO” mode by pressing “MODE” button.
2. Select your desired temperature by pressing “TEMP” buttons.
3. Press “ON/OFF” button to start the air conditioner: “OPERATION” LED on Indoor Unit’s panel will stop flashing and will light up.

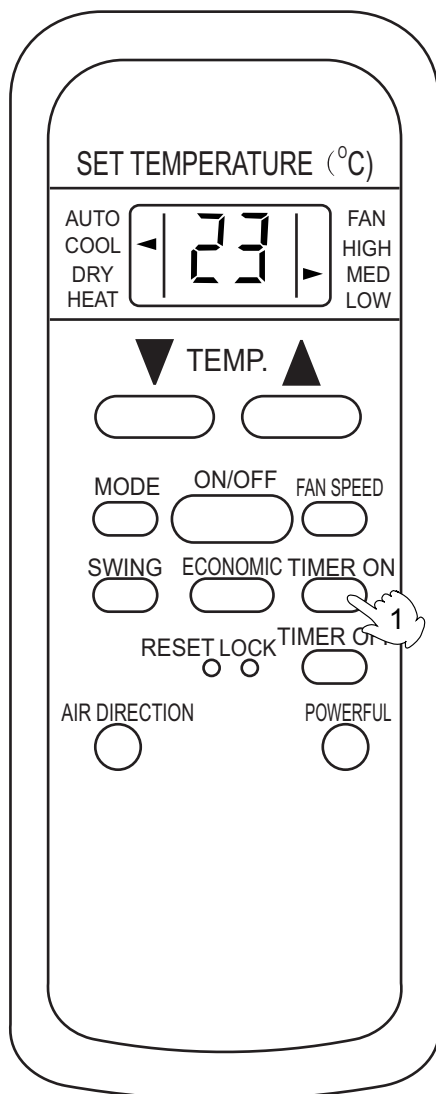
Stop

Press “ON/OFF” button on remote controller to stop the air conditioner’s operation.

NOTES:

1. In “AUTO” mode, it is not possible to select your desired fan speed, as it will be automatically controlled by the microcomputer (the display shows “LOW” indication).
2. The User can select his desired room temperature. However, if batteries are replaced or “RESET” button is pressed, operation mode changes to “AUTO” and temperature is automatically set to 24°C.
3. “AUTO” mode, as well as other operation modes, is memorized by the microcomputer, so if you would like to keep it at next restart of the air conditioner, you only need to press “ON/OFF” button on remote controller. In “DRY” mode, if the User selects a temperature other than 24°C, set temperature will be kept in memory for next restart of the air conditioner.
4. It is possible to change operation mode while the air conditioner is operating in “AUTO” mode. However, the Unit will not immediately start operating according to the new mode, but a little delay is needed for carrying out a test and choosing new operating parameters.

TIMER ON (Programmed start)



TIMER function allows you to program the start and/or stop of the air conditioner according to your needs.

Connecting the air conditioner

Connect the air conditioner to the power source: the "OPERATION" LED on Indoor Unit's panel will start flashing.

Programmed start - TIMER ON

1. Press TIMER ON button: remote controller will display "TIMER ON" indication, the symbol "h" and the digits for programming the setting. The remote controller is ready to receive the setting for TIMER ON.
2. Press again TIMER ON button for several times, till reaching your desired time for the air conditioner's automatic start.

After 0.5 seconds since the time for programmed start was set, the remote controller will send settings to Indoor Unit. OPERATION LED on Indoor Unit will go out and TIMER LED will light up.

After 2 seconds, the symbol "h" will go out and remote controller will display again set temperature. At set time, the air conditioner will start operating and TIMER LED will go out.

3. To cancel TIMER ON setting, please adjust time setting to 0:00.

Stop

Press "ON/OFF" button on remote controller to stop the air conditioner's operation.

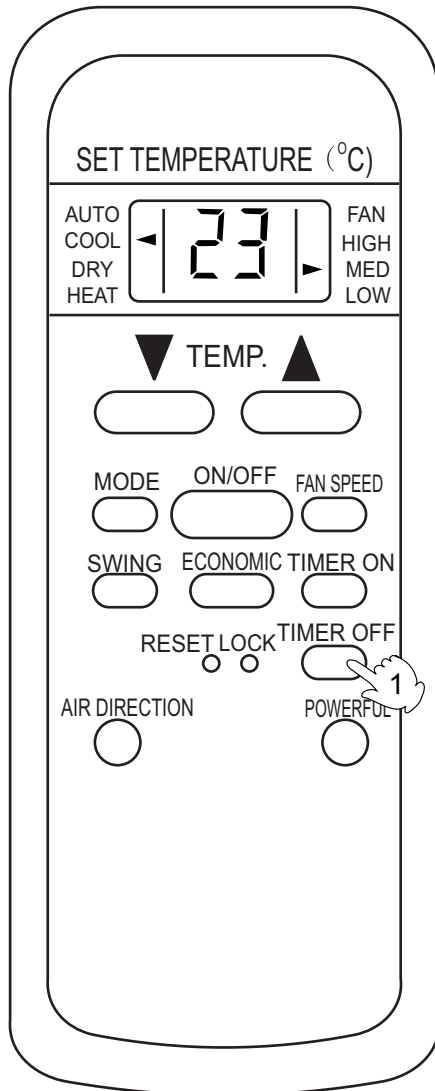
CAUTION !

When "TIMER" function is selected, the remote controller automatically sends signals for programmed start/stop to the Indoor Unit. If you would like to be sure that these signals are received by Indoor Unit, it is necessary to address the remote controller towards the Indoor Unit's signal receiver, and check there are no obstacles that may affect the impulses' transmission.

NOTES:

1. Time increases and decreases are 30-minutes' steps till 10 subsequent hours, and 60-minutes' steps from 10 to 24 hours. The remote controller's Timer is not a clock, so it is necessary to set the time period - not the exact time - for programmed start.
2. Unlike operation modes, TIMER settings are not kept in memory by the microcomputer, therefore if a power failure occurs, TIMER settings will be cancelled and need to be set again.
3. Before selecting TIMER settings, it is possible to choose your desired operation mode.
4. TIMER max. range is 24 hours, i.e. it is not possible to operate weekly settings.
5. To modify TIMER settings, press again TIMER ON button and repeat the above procedure for TIMER ON setting.

TIMER OFF (Programmed stop)



TIMER OFF function will allow you to set programmed stop time for the air conditioner. In this way, the appliance will automatically stop at your desired time.

Connecting/operating the air conditioner

Connect the air conditioner to the power source: the "OPERATION" LED on Indoor Unit's panel will start flashing.

Press "ON/OFF" button on remote controller to start the air conditioner : "OPERATION" LED on Indoor Unit will light on.

Programmed stop - TIMER OFF

1. Press TIMER OFF button: remote controller will display "TIMER OFF" indication, the symbol "h" and the digits for programming the setting. The remote controller is ready to receive the setting for TIMER OFF.

2. Press again TIMER OFF button for several times, till reaching your desired time for the air conditioner's automatic stop.

After 0.5 seconds since the time for programmed stop was set, the remote controller will send settings to Indoor Unit. TIMER LED on Indoor Unit will light up. After 2 seconds, the symbol "h" will go out and remote controller will display again set temperature. At set time, the air conditioner will stop operating and OPERATION LED and TIMER LED will go out.

3. To cancel TIMER OFF setting, please adjust time setting to 0:00.

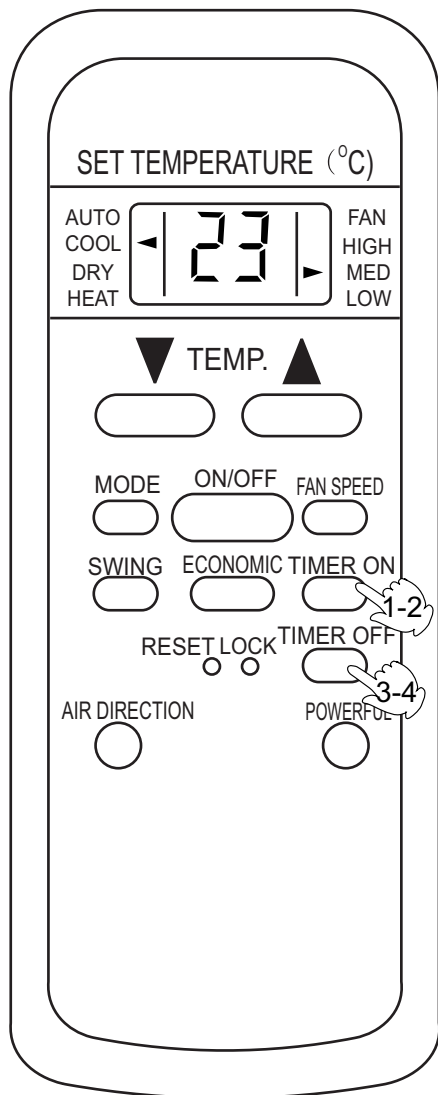
CAUTION !

When "TIMER" function is selected, the remote controller automatically sends signals for programmed start/stop to the Indoor Unit. If you would like to be sure that these signals are received by Indoor Unit, it is necessary to address the remote controller towards the Indoor Unit's signal receiver, and check there are no obstacles that may affect the impulses' transmission.

NOTES:

See "TIMER ON Mode".

TIMER ON/OFF Mode (Programmed Start/Stop)



TIMER ON/OFF (or TIMER OFF/ON) function allows you to set the automatic start/stop or stop/start of the air conditioner at your desired time.

Connecting/operating the air conditioner

Connect the air conditioner to the power source:
"OPERATION" LED on Indoor Unit's panel will start flashing.

Programmed start/stop

TIMER ON/OFF (TIMER OFF/ON)

1. Press TIMER ON button: remote controller will display "TIMER ON" indication, the symbol "h" and the digits for programming the setting. The remote controller is ready to receive the setting for TIMER ON.
2. Press again TIMER ON button for several times, till reaching your desired time for the air conditioner's automatic start.
3. Press TIMER OFF button: remote controller will display "TIMER OFF" indication, the symbol "h" and the digits for programming the setting. The remote controller is ready to receive the setting for TIMER OFF.
4. Press again TIMER OFF button for several times, till reaching your desired time for the air conditioner's automatic stop.

After 0.5 seconds since the time for programmed start/stop was set, the remote controller will send settings to Indoor Unit. TIMER LED will light up. After 2 seconds, the display will show set temperature. At set time, the air conditioner will start/stop operation and OPERATION LED and TIMER LED will light up or go out according to the selected combination.

5. To cancel TIMER settings, please adjust TIMER ON and TIMER OFF time to 0:00.

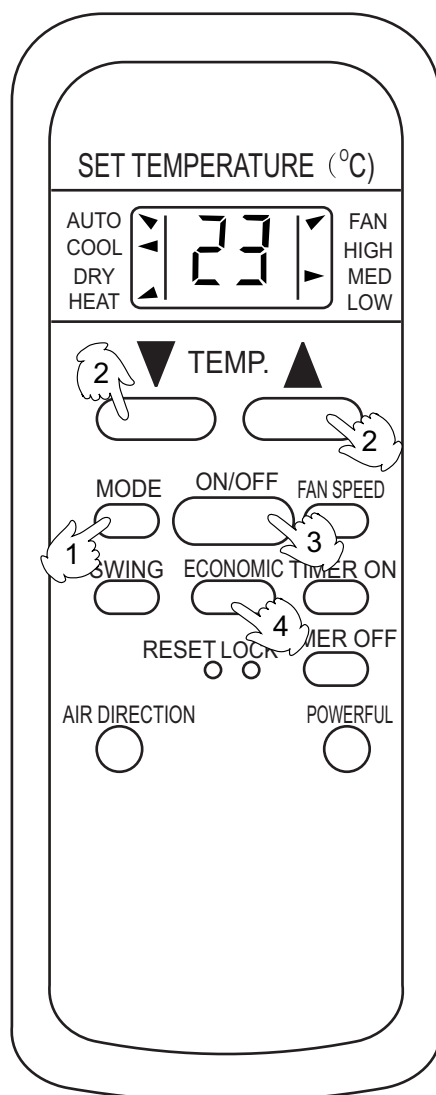
CAUTION !

When "TIMER" function is selected, the remote controller automatically sends signals for programmed start/stop to the Indoor Unit. If you would like to be sure that these signals are received by Indoor Unit, it is necessary to address the remote controller towards the Indoor Unit's signal receiver, and check there are no obstacles that may affect the impulses' transmission.

NOTES:

See "TIMER ON Mode".

ECONOMIC Mode



Connecting/operating the air conditioner

Connect the air conditioner to the power source:
"OPERATION" LED on Indoor Unit's panel will start flashing.

1. Select your desired operation mode by pressing "MODE" button:
 - AUTO
 - COOL
 - HEAT
 - FAN
2. Select your desired temperature by pressing "TEMP" button.
3. Press "ON/OFF" button on remote controller to start the air conditioner: "OPERATION" LED on Indoor Unit's panel will stop flashing and will light up.
4. Press "ECONOMIC" button.

To cancel Energy Saving function:

Press "ECONOMIC" button again.

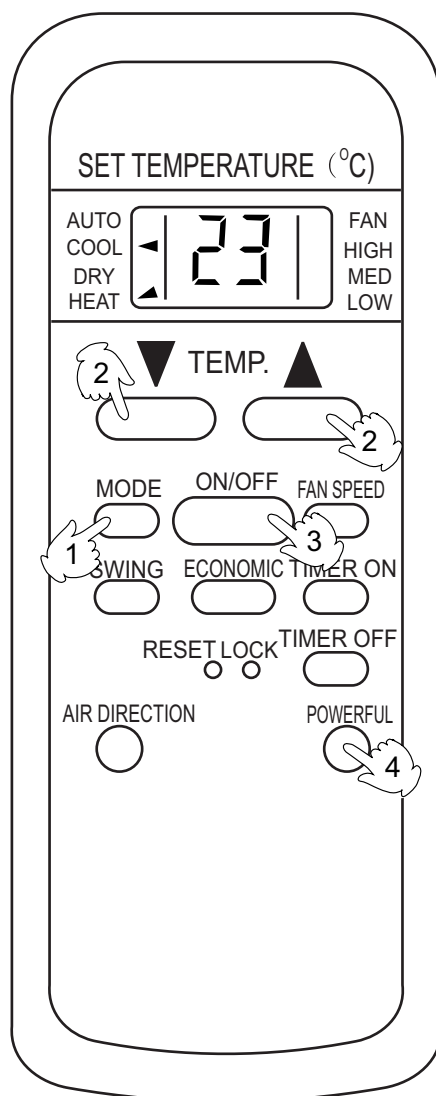
Stop

Press "ON/OFF" button on remote controller to stop the air conditioner's operation.

By selecting "ECO" mode, fan will work at "LOW" speed.

Fan speed is automatically selected, so it is not possible to change it.

POWERFUL "Mode"



Outline of "Powerful" mode

"Powerful" function allows you to reach your desired temperature in a short time.

"POWERFUL" button on remote controller, corresponding to this function, is active only in "COOL" and "HEAT" modes.

Connecting/operating the air conditioner

Connect the air conditioner to the power source:
"OPERATION" LED on Indoor Unit's panel will start flashing.

1. Press "MODE" button and select your desired operation mode, between:
 - COOL
 - HEAT
2. Select your desired temperature by pressing "TEMP" buttons.
3. Press "ON/OFF" button to start the air conditioner: "OPERATION" LED on Indoor Unit's panel will stop flashing and will light up.
4. Press "POWERFUL" button.

To cancel "POWERFUL" function:

Press "POWERFUL" button again.

Stop

Press "ON/OFF" button on remote controller to stop the air conditioner's operation.

NOTES:

- When the air conditioner is operating in "Powerful" mode, unevenness of room air temperature may occur due to intensive operation in a short time.
- Anyway, operation in "Powerful" mode does not last more than 15 minutes, then regular operation is automatically restored.

SELECTING THE AIR OUTLET DIRECTION

Air outlet selector

Air outlet selector allows you to choose the air outlet direction.
To reach the selector, you need to open the Indoor Unit's frontal panel.



WARNING

Before opening the frontal panel, switch off the air conditioner and disconnect it from the power source. il pannello frontale. Never touch the metallic components inside the Unit, to avoid injuries.

Open the frontal panel by following the instructions in Figure 1:

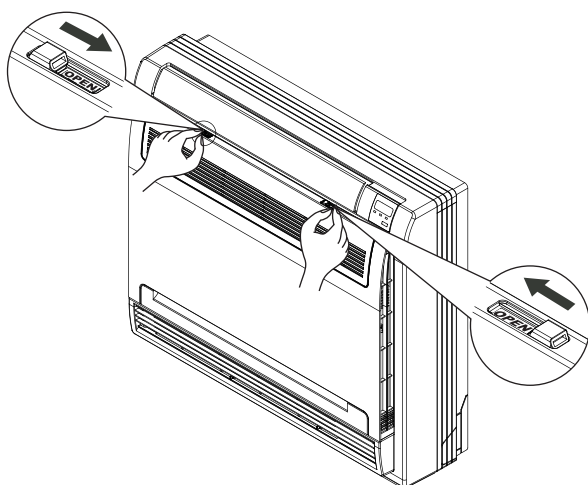


Fig. 1

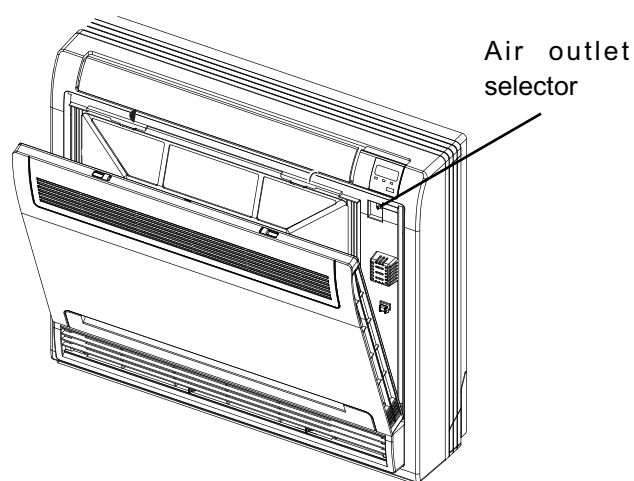
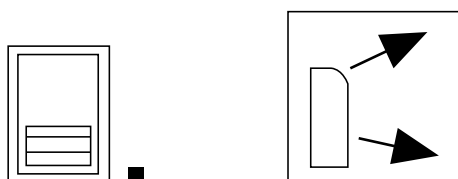
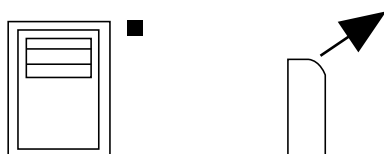


Fig. 2



Factory default (recommended):

The Unit automatically adjusts the airflow direction on the basis of the operation conditions and settings carried out by the User.



Alternative optional setting:

The Unit emits air from the upper outlet only.

SELECTING THE AIR OUTLET DIRECTION

Airflow supply with standard setting of outlet selector:

Operation	Circumstance	Description
Dry mode	Always	Air is supplied through the upper outlet only.
Cooling mode	When set temperature has been reached, or if 1 hour has elapsed since the start in Cooling operation.	Air is supplied through the upper outlet only.
	During the operation start, or when set temperature has not already been reached.	Air is supplied through both outlets.
Heating mode	During the operation start, or when room temperature is low.	Air is supplied through the upper outlet only.
	In all other cases.	Air is supplied through both outlets.

Air supply with alternative optional setting of outlet selector:

- In whatever circumstance and operation mode, air is supplied through the upper outlet only.
- Use this setting when you would like to reduce the air volume supplied by the Unit (for example, during the night rest).

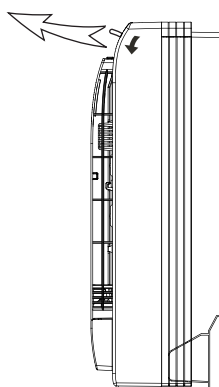
ADJUSTING THE AIRFLOW DIRECTION

Vertical adjustment

By pressing "AIR DIRECTION" button, it is possible to select and fix the position of air outlet louver. The recommended positions for the different operation modes are shown by the following Figures:

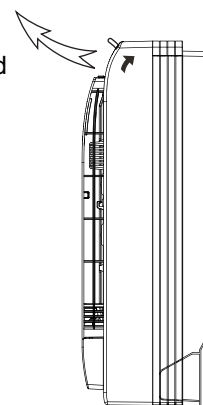
Cool / Dry modes

In "COOL" and "DRY" modes, it is recommended to adjust the louver horizontally.



Heat mode

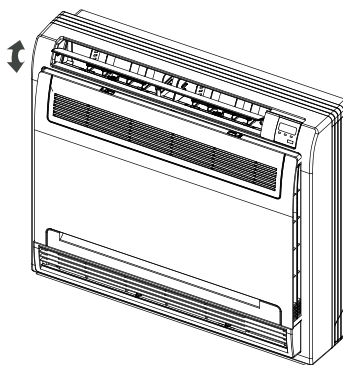
In "HEAT" mode, it is recommended to adjust the louver vertically.



Press "AIR DIRECTION" button several times till reaching your desired angle for the air outlet louver. This position will be memorized for next restart of the air conditioner.

Automatic swinging

Press "SWING" button once: the motorized louver will automatically start swinging up and down continuously:



CAUTION

Air supply flaps must always be adjusted by pressing the relevant button on remote controller. Never move the louver by hand, so as not to damage the adjustment mechanism.

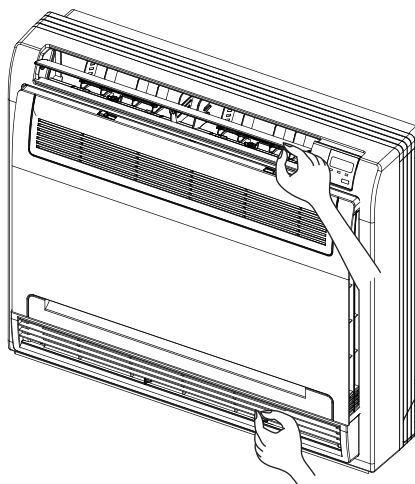
Set temperature value adjustment must always be carried out with the supervision of experienced people.

If the louver does not move properly, try to turn off the air conditioner and then turn it on again: now normal operation should be restored.

ADJUSTING THE AIRFLOW DIRECTION

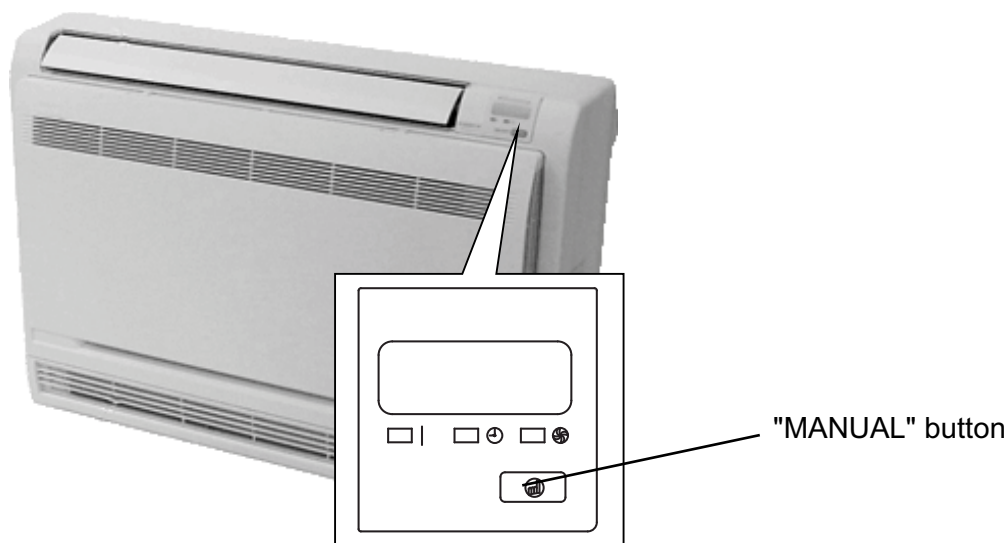
Horizontal adjustment

it is also possible to adjust the horizontal airflow direction. Move manually the knobs on left and right sides:



Horizontal airflow adjustment can be carried out by hand only.
Horizontal automatic swinging of the flaps is not available.

EMERGENCY OPERATION & TEST SWITCH



OPERATION IN EMERGENCY MODE:

If you have lost the remote controller or its batteries are exhausted, the air conditioner can be started by pressing once "MANUAL" button on the Indoor Unit's frontal panel. The air conditioner will start operating in the Emergency running "AUTO" mode.

During Emergency running, signals transmitted by the remote controller can be received by Indoor Unit.

TESTING THE AIR CONDITIONER IN FORCED COOLING MODE

Press "MANUAL" button twice. "OPERATION" LED starts flashing. The air conditioner will start operating in forced "COOL" mode at "LOW" fan speed for 30 minutes. Then, operation will switch to "AUTO" mode.

During the Test, signals transmitted by the remote controller cannot be received by Indoor Unit.

NOTE: Do not use Test mode for normal operation.

End of operation in Emergency mode or in forced Cooling mode

Press "MANUAL" button twice during Emergency operation, or press "MANUAL" button once during Test mode: the air conditioner will stop.

Normal operation can be restored by the remote controller as usual.

ORDINARY MAINTENANCE AND ADVICE FOR USE

Indoor Unit's cleaning

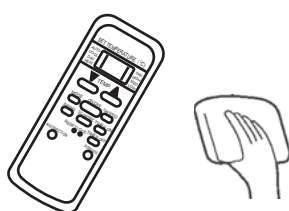


WARNING

Before starting any kind of ordinary maintenance:

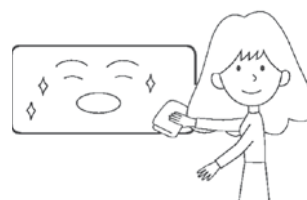
- 1 - Stop the appliance by pressing "ON/OFF" button on remote controller;
- 2 - Move the circuit breaker to "OFF" or "0" position;
- 3 - Pull the plug out of the power socket;
- 4 - To reach the Unit, please use a stepladder or other appropriate bearing strong enough to ensure your safety.

Cleaning the remote controller



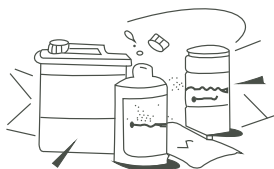
Do not use water, but a dry cloth. Do not use products for glass cleaning, nor soaked in detergents.

Cleaning the Indoor Unit



Use a dry and soft cloth. In case of need, dampen the cloth in water and neutral detergent, then wring well.

Never use any of the following products for cleaning



Benzine, paint solvents, polishing products, by-products of oil in general, etc. may damage the outside surfaces of Unit and cause deformations and scratches on the appliance and on the remote controller.



The use of very hot water (over 40°C) may discolour and/or deform the plastic parts.

NOTES:

- If the appliance or the inlet grille are very dirty, clean them with a cloth soaked in tepid water and neutral detergent. Rinse in clean water and dry well. The presence of humidity on the inlet grille may cause electric shocks.
- Never use any abrasive sponge for cleaning, to avoid scratching the Unit's surfaces.
- If the grille is open or has been removed, do not touch the metallic flaps of the heat exchanger, as the flaps are sharp and may hurt you.
- Do not expose the grille or the Unit to direct sunlight, to avoid discolouring or deforming them.

Outdoor Unit's cleaning

- Check regularly that the air inlet and outlet are not obstructed by dust or dirt in general.
- For any other cleaning or maintenance of Outdoor Unit, always contact the Authorized Technical Service.

Removing and cleaning the air filters

- 1 Open the Indoor Unit's frontal panel by sliding towards the centre the buttons on left and right sides (see Fig. 1).

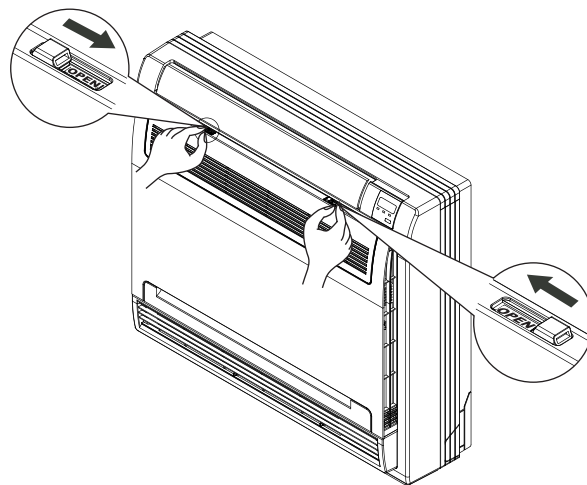


Fig.1

- 2 Lightly press the claws on left and right sides of the filter, then take out the filter by pulling it upwards (Fig. 2).

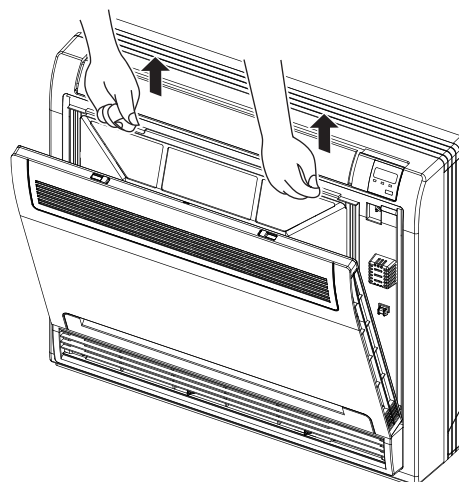


Fig.2

- 3 Take out the 2 special anti-formaldehyde filters. by detaching the 4 fixing claws from the air filter's frame (Fig. 3).

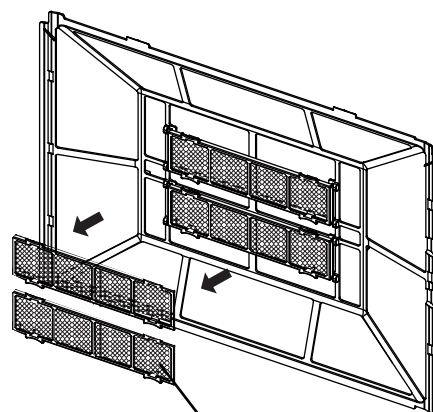


Fig.3

Cleaning of the anti-formaldehyde filters:

Wash the filters in water every 6 months.

It is recommended to replace the anti-formaldehyde filters every 3 years.

Anti-formaldehyde filter

Cleaning of the air filter:

Clean the air filter by using a vacuum cleaner, or wash it with water. If the dust accumulation is too heavy, please use a soft brush and mild detergent to clean it. In case of washing with water, dry the filter in the shade and not under the rays of sunlight or by other heat sources.

- If the cleaning is carried out with a vacuum cleaner, the filter's outside part must be oriented towards you (Fig. 4).
- If the cleaning is carried out with water, the filter's inside part must be oriented towards you (Fig. 5).

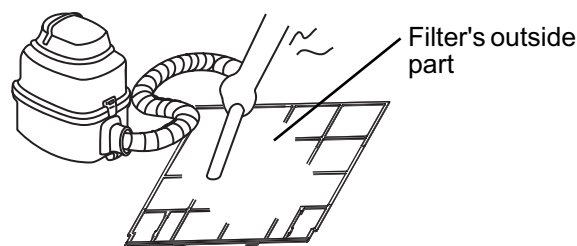


Fig.4

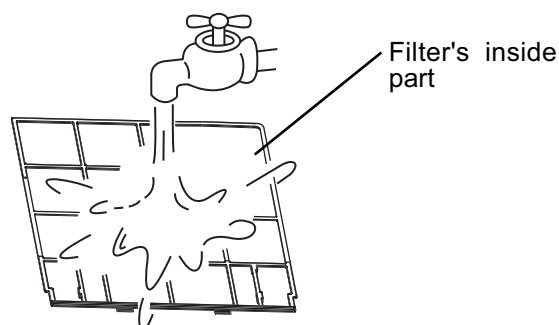


Fig.5

- 4 Reinstall the anti-formaldehyde filters, by re-attaching correctly the claws on the air filter's frame.
Reinstall correctly the air filter on the Indoor Unit.
- 5 Close the Indoor Unit's panel.



CAUTION

Never operate the Unit without the filters.

CLEAN THE AIR FILTER EVERY 2 WEEKS.

NOTES:

- The filters must always be clean: if they are clogged with dust or other solid particles in general, the cooling and heating capacity of the air conditioner will be reduced. Moreover, the appliance will be noisier and consume more electricity.
- Normally, it is not necessary to replace the filters: you only have to clean them at regular intervals. Replace the filters when the accumulated dirt is too hard to be removed.
- In case the air filters are damaged and need to be replaced, it is necessary to order them as spare parts: please contact your Retailer or the Authorized Technical Service.
- **IMPORTANT:** Never reinstall the filters on Indoor Unit in case they are damaged.

Normally, the cleaning must be carried out every 2 weeks.

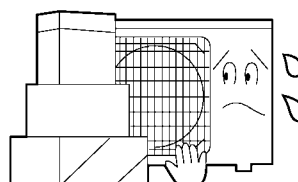
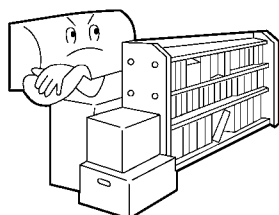
However, if the air conditioner is used for many hours a day in a dusty environment, it must be cleaned more often than other air conditioners used in less heavy conditions.

At the beginning of season

When restarting the air conditioner after a long time, or at the beginning of the season, please carry out the following procedure:

1 Do not obstruct the air inlet and outlet

Check if any objects obstruct the airflow at the air inlet and outlet on Indoor and Outdoor Units.

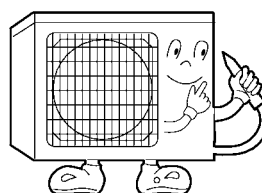


2 Check the Unit's fixing

Check the condition of fixing devices on Indoor and Outdoor Units, especially those made of iron on Outdoor Units which are more subject to corrosion, so as to avoid their possible collapse.

3 Earth cable

Check if there are no false electric contacts and especially if the earth cable is not interrupted and well connected.



CAUTION

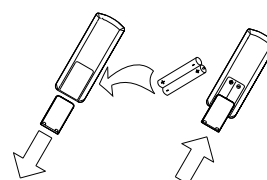
An incorrect or inexistent earth connection may cause the danger of electric shocks.

4 Air filters

Check if there are the filters on Indoor Unit. The filters must be clean. In case there is no filter or the filters are dirty, reinsert or clean them.

5 Remote controller's batteries

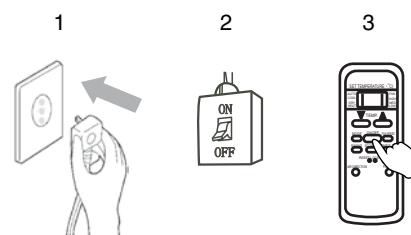
Insert batteries in the remote controller's battery case.



6 Unit's start

The Outdoor Unit must be connected to the power line 12 hours before its start. Insert the plug into the power socket and move the circuit breaker to "ON": "OPERATION" LED on Indoor Unit will start flashing once per second.

Start the Indoor Unit by pressing "ON/OFF" button on remote controller only 12 hours after the Outdoor Unit has been powered.



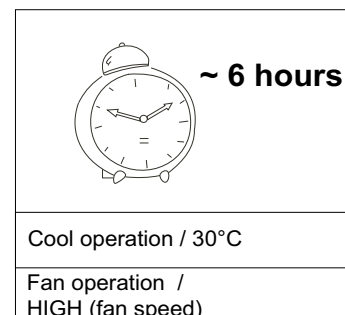
At the end of season

At the end of the season or in case you foresee not to use the air conditioner for a long time, please carry out the following procedure:

1 Dry the Unit

Operate the air conditioner in "COOL" mode for about half a day by setting a temperature of 30°C, or operate the appliance in "FAN" mode for half a day by setting a "HIGH" fan speed.

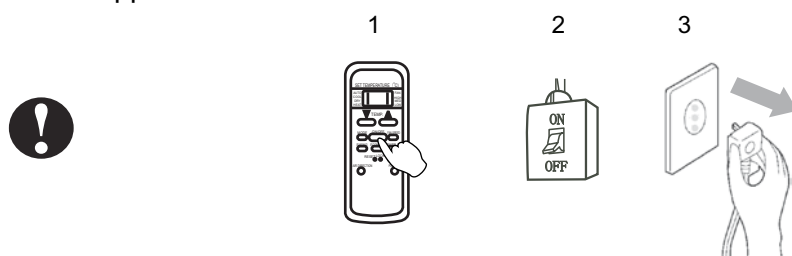
This is for drying the Unit and preventing the forming of moulds and/or bad smells.



2 Disconnect the appliance from the power supply

Stop the air conditioner by pressing "ON/OFF" button on remote controller, move the circuit breaker to "OFF" or "0" and pull the plug out of the power socket.

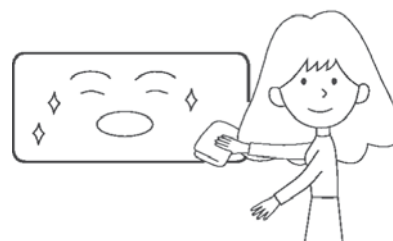
This is necessary as the appliance consumes a little quantity of electricity even if it is stopped.



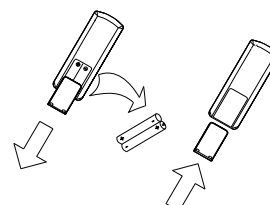
3 Clean and reinstall the air filters



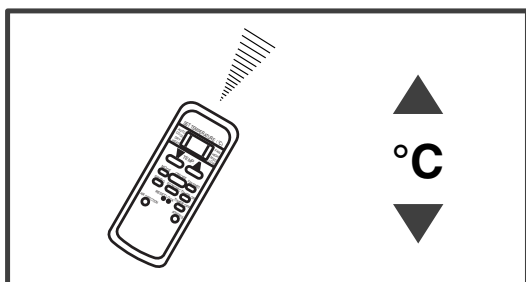
4 Clean the body or the panel of the Unit



5 Remove batteries from the remote controller

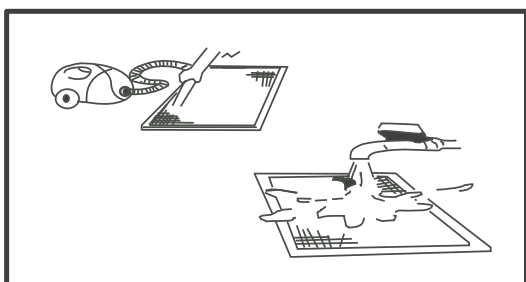


Suggestions for economical use



Select a suitable temperature value

- In Heating mode, avoid to set too high temperature value.
- In Cooling mode, avoid to set too low temperature values.



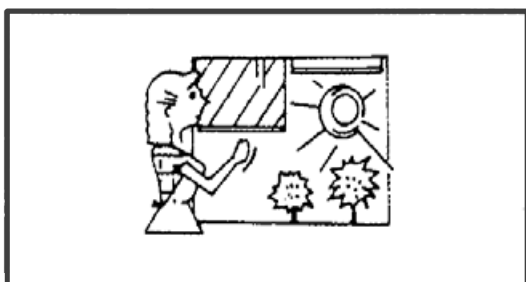
Often clean the air filters

- To obtain the air conditioner's best performance, it is necessary to clean the filters on Indoor Unit at least every 2 weeks, as already described. If dust accumulates on the filter, the air conditioner's performance decreases.



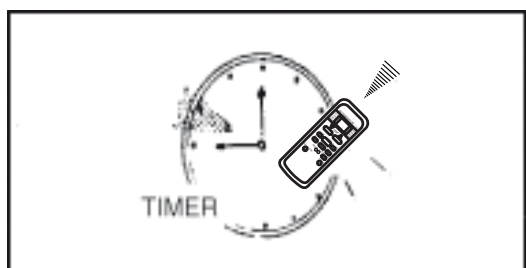
Do not keep doors or windows open

- This decreases the air conditioner's performance and causes an increase in electricity consumption. Moreover, in case of thermal overload, the automatic protective functions may intervene, and the air conditioner will stop operation.



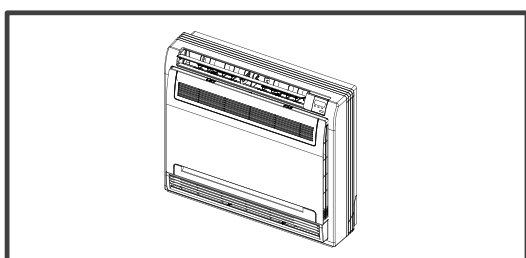
Reduce the exposure to sunlight

- In Cool mode, protect the window panes by curtains or shutters. In this way, you can obtain more comfort and a reduction in electricity consumption.



Use TIMER function moderately

- Do not select operating intervals higher than real comfort needs, and consider above all the real stay of people inside the air-conditioned room.



Adjust the airflow correctly

- With a little experience, it is possible to estimate by yourself the increase in comfort which arises from a correct adjusting of the airflow coming out of the Unit. Energy consumptions being equal, comfort remarkably increases.

TROUBLESHOOTING

Following symptoms are not air conditioner's troubles

The following table shows a series of seeming malfunctions.

Please check the following items before calling the Authorized Technical Service.

WHAT HAPPENS	REASON
After a stop, the air conditioner does not restarts immediately.	<ul style="list-style-type: none"> • If "OPERATION" LED on Indoor Unit lights up, it is normal that the system does not immediately restart. A protective function (3-minutes' delay) is active for preventing damages to the compressor every time the operation restarts after a stop. • If both "OPERATION" and "PRE-DEF" lamps light up, this is not a malfunction: the compressor does not immediately restarts because of the intervention of the anti-cold drafts protection.
Change into the "FAN" mode during "COOL" mode.	<ul style="list-style-type: none"> • In order to prevent the frosting of indoor heat exchanger, the system changes into "FAN" mode automatically, and restores to the "COOL" mode after soon. • When the room temperature value drops to the set temperature value, compressor stops and the Indoor Unit changes to "FAN" mode. When temperature rises up, the compressor starts again. It is the same in "HEAT" mode.
White mist comes out of the Indoor Unit.	<ul style="list-style-type: none"> • If during operation in "COOL" mode, humidity is high and the Indoor Unit's inside is very dirty, temperature distribution inside the room becomes uneven. It is necessary to clean the Indoor Unit: please call the Authorized Technical Service.
White mist comes out of the Outdoor Unit.	<ul style="list-style-type: none"> • During operation in "HEAT" mode. This is because the Outdoor Unit is carrying out the automatic defrosting.
Noise from the Indoor Unit or from the Outdoor Unit	<ul style="list-style-type: none"> • When the system stops after heating operation, the Indoor Unit emits a creaking sound. This is normal: expansion and contraction of plastic parts caused by temperature changes make this noise. • During the start in "COOL" mode or after the stop of "HEAT" operation, you may hear a gurgling sound or a hissing sound. This is the sound of refrigerant gas flowing through both Indoor and Outdoor Units. • When operation mode is switched from "COOL" to "HEAT", you may hear a hissing sound coming from the refrigerant circuit. This is the noise of refrigerant caused by flow stop or flow change. • The tone of operating noise changes. This noise is caused by the change of frequency.
Dust comes out of the Indoor Unit.	<ul style="list-style-type: none"> • This happens if the Unit is used again after a long time. During this time, dust has got inside the Unit.
The Indoor Unit gives off bad smells.	<ul style="list-style-type: none"> • The Unit can absorb the smell of rooms, furniture, cigarettes, etc., and then emits it again.
The Outdoor Unit's fan does not spin.	<ul style="list-style-type: none"> • This happens during the system's operation. The speed of the fan is controlled in order to optimize product operation.

TROUBLESHOOTING

Problems deriving from the remote controller

Before starting troubleshooting, please perform the following checks:

It is not possible to change the settings while the air conditioner is operating		
WHAT HAPPENS	CHECK	POSSIBLE REASON
The User cannot change the indoor fan speed.	Check if "AUTO" mode is displayed on remote controller.	When operating in "AUTO" mode, the indoor fan speed is automatically set by the electronics.
	Check if "DRY" mode is displayed on remote controller.	When operating in "DRY" mode, the indoor fan speed is automatically set by the electronics.

The transmission indicator on the remote controller does not light up		
WHAT HAPPENS	CHECK	POSSIBLE REASON
Signals from the remote controller are transmitted only when "ON/OFF" button is pressed.	Check if TIMER function is active.	Signals from remote controller cannot be transmitted because the appliance is stopped.

Set point temperature is not displayed on remote controller		
WHAT HAPPENS	CHECK	POSSIBLE REASON
Set point temperature is not displayed on remote controller.	Check if "FAN" mode has been selected.	Set temperature cannot be set when operating mode is "FAN".

"TIMER" indications displayed on remote controller go off		
WHAT HAPPENS	CHECK	POSSIBLE REASON
After a lapse of time, "TIMER OFF" indication disappears from the display.	Check if TIMER OFF function has been set.	The air conditioner automatically stops at set time, and TIMER indication on remote controller goes off.
After a lapse of time, "TIMER ON" indication disappears from the display.	Check if TIMER ON function has been set.	As soon as set time for start has been reached, the air conditioner starts and the displayed time goes off.

The signal receiving tone from Indoor Unit is no more heard		
WHAT HAPPENS	CHECK	POSSIBLE REASON
When pressing "ON/OFF" button on remote controller, no receiving tone is heard from Indoor Unit.	Check if remote controller is actually turned to the receiver on the Indoor Unit, and that no obstacles are placed between them.	Turn the remote controller to the receiver on the Indoor Unit, then push "ON/OFF" button.
Remote controller's buttons are not active.		Press "RESET" button.

NOTE: Sometimes, the remote controller may stop operating correctly because of interferences or electromagnetic noise. In this case, it is necessary to remove batteries from the remote controller, possibly eliminate the noise's reason, wait a few minutes and reinsert the batteries in their case. Now operation should be normal.

TROUBLESHOOTING

Problems and possible solutions

The following table shows a series of problems and their possible reasons and solutions.

Compiere le verifiche descritte prima di richiedere l'intervento dell'Assistenza Tecnica.

PROBLEM	REASONS	SOLUTIONS
Unit does not start.	<ul style="list-style-type: none"> • Power failure. • Power switch is off. • Fuse of power switch may have burned. • Batteries of remote controller exhausted or other problem of controller. 	<ul style="list-style-type: none"> • Wait for the comeback of power. • Switch on the power. • Replace the fuse. • Replace the batteries or check the controller.
Air flowing normally, but completely cannot cooling.	<ul style="list-style-type: none"> • Temperature is not set correctly. • The 3-minutes' delay protection for compressor is active. 	<ul style="list-style-type: none"> • Set the temperature properly. • Wait 3 minutes, then the compressor will restart and the Unit will restarts cooling.
Unit starts and stops frequently.	<ul style="list-style-type: none"> • Refrigerant is too little or too much. • Presence of air or insufficient refrigerant gas in the refrigerating circuit. • Compressor's malfunction. • Voltage is too high or too low. • System circuit is blocked. 	<ul style="list-style-type: none"> • Check leakage, and rightly recharge refrigerant. • Vacuumize and rightly recharge refrigerant. • Repair or replace compressor. • Install a manostat. • Find reasons and solution.
Low cooling effect.	<ul style="list-style-type: none"> • Heat exchanger on Indoor and Outdoor Units is dirty. • Air filter is dirty. • Air inlets and outlets on Indoor/ Outdoor Units are obstructed. • Doors and/or windows are open. • Sunlight directly shines. • There are too much heat sources. • Outdoor temperature is too high. • Leakage or lack of refrigerant. 	<ul style="list-style-type: none"> • Clean the heat exchanger. • Clean the air filter. • Eliminate all dirties on the air inlets/ outlets. • Close doors and/or windows. • Install curtains in order to shelter the Unit from sunshine. • Reduce heat sources. • AC cooling capacity is reduced (this is normal). • Check leakage and rightly recharge refrigerant.
Low heating effect.	<ul style="list-style-type: none"> • Outdoor temperature is lower than 7°C. • Doors and/or windows are not completely closed. • Leakage or lack of refrigerant. 	<ul style="list-style-type: none"> • Install further heating devices. • Close the doors and/or the windows. • Check leakage and rightly recharge refrigerant.

TROUBLESHOOTING

Table of Error Codes on Indoor Unit

NO.	OPERATION LED	TIMER LED	PRE-DEF LED	Malfunction of HFII 351 XR Indoor Unit	Malfunction of HFII 531 XR Indoor Unit
1	☆	×	×	Room temperature sensor is abnormal	Room temperature sensor is abnormal
2	×	×	☆	Evaporator sensor is abnormal	Evaporator sensor is abnormal
3	☆	☆	☆	Condenser sensor is abnormal	_____
4	×	☆	×	Indoor Unit's malfunction	Indoor Unit's malfunction
5	×	×	◎	_____	Outdoor Unit's malfunction

(× Extinguish, ☆ Flash at 5Hz, ◎ Flash at 0.5Hz)

CAUTION:

Never try to repair the Air Conditioner by yourself

if one of the following malfunctions occur, immediately stop operation, turn off the main switch and contact the Authorized Technical Service:

- You smell something burning.
- "OPERATION" LED on Indoor Unit is flashing rapidly (5Hz). This lamp is still flashing rapidly after turning off the power and turn on again.
- Remote controller is malfunctioning, or its buttons do not work well.
- A safety device such as a fuse or a breaker frequently actuates.
- Obstacles or water enter the Unit.
- Water leaks from Indoor Unit.
- Other malfunctions are observed.

AUTOMATIC RESTART AFTER A POWER FAILURE

- When a power failure occurs during operation, the air conditioner stops immediately.
- When power is restored, the "OPERATION" lamp on the Indoor Unit starts blinking.
- In particular, the air conditioner will restart automatically after 3 minutes have elapsed since power is restored. This means that it is not required to press the "ON/OFF" button on the remote control.

The settings will be the same as before the blackout.

However, it is necessary to program TIMER again, as in case of a blackout, TIMER settings for automatic start/stop of the air conditioner are cancelled.

EC DECLARATION OF CONFORMITY

We **TERMAL Srl** - 14, Via della Salute - 40132 Bologna - Italy

DECLARE

under our sole responsibility that **HOKKAIDO** products

Indoor Units:

• HFII 351 XR • HFII 531 XR

Outdoor Units:

• HCKI 351 XR • HCKI 531 XR

conform with the following directives:

- *EMC Directive 89/336/EEC and its following 92/31 EEC by L.D. No. 476 dated Decdmber 4th, 1992.*
- *LV Directive 73/23 EEC and applied Standards EN 60335-2-40.*

President
Giorgio Giatti



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TERMAL Srl
14, Via della Salute
40132 Bologna - Italy
Tel. +39.051.41.33.111
Fax +39.051.41.33.112
www.termalgroup.com

Due to on-going technological development of the products by the Manufacturer, we reserve the right to vary the technical specifications at any time without notice.